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PASSWORD:
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TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page for STN Seminar NEWS 2 JAN 02 STN pricing information NEWS 3 JAN 16 CAS patent coverage enha prophetic substances NEWS 4 JAN 28 USPATFULL, USPAT2, and Use useful more display forma	
NEWS 2 JAN 02 STN pricing information NEWS 3 JAN 16 CAS patent coverage enha prophetic substances NEWS 4 JAN 28 USPATFULL, USPATZ, and U	rnational * * * * * * * * * *
NEWS 2 JAN 02 STN pricing information NEWS 3 JAN 16 CAS patent coverage enha prophetic substances NEWS 4 JAN 28 USPATFULL, USPATZ, and U	Schedule - N. America
NEWS 3 JAN 16 CAS patent coverage enha prophetic substances NEWS 4 JAN 28 USPATFULL, USPAT2, and U	for 2008 now available
prophetic substances NEWS 4 JAN 28 USPATFULL, USPAT2, and U	anced to include exemplified
NEWS 4 JAN 28 USPATFULL, USPAT2, and U	
	ISPATOLD enhanced with new
NEWS 5 JAN 28 MARPAT searching enhance	
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of publication	
	reloaded MEDLINE segment
NEWS 8 JAN 28 MEDLINE and LMEDLINE rel	
NEWS 9 FEB 08 STN Express, Version 8.3	
NEWS 10 FEB 20 PCI now available as a r	
NEWS 11 FEB 25 IFIREF reloaded with enh	
NEWS 12 FEB 25 IMSPRODUCT reloaded with enti-	
	nced with ECLA and current
U.S. National Patent Cla	
	JDB enhanced with new custom
IPC display formats	DD CHIMANCEA WICH NEW CABCOM
	ith additional experimental
spectra	ch addicional experimental
	patent number format for U.S.
applications updated	Accide number format for o.b.
NEWS 17 MAR 31 LPCI now available as a	replacement to LDPCT
	ASE reloaded with enhancements
NEWS 19 APR 04 STN AnaVist, Version 1,	
NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX	
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NEWS 21 APR 28 EMBASE Controlled Term t	
NEWS 22 APR 28 IMSRESEARCH reloaded wit	
	on STN for patent family
searching	on SIN for pacent raming
	NE enhanced with new homology
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NEWS 25 JUN 06 EPFULL enhanced with 260	1 000 English abstracts
NEWS 26 JUN 06 KOREAPAT updated with 41	
NEWS 27 JUN 13 USPATFULL and USPAT2 upd	
patent numbers for U.S.	
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	more than 1 million U.S.
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NEWS 32 JUN 30 STN on the Web enhanced with new STN AnaVist

Assistant and BLAST plug-in

NEWS 33 JUN 30 STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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NEWS IPC8 For general information regarding STN implementation of IPC 8

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=> file registry

COST IN U.S. DOLLARS
FULL ESTIMATED COST

ENTRY SESSION 0.21 0.21

TOTAL

SINCE FILE

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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http://www.cas.org/support/stngen/stndoc/properties.html

_ .

Uploading C:\Program Files\STNEXP\Queries\10511736.str

```
6 7 8 9 10 11 12 18 19 20 21 22 29 30
ring nodes :
1 2 3 4 5 13 14 15 16 17 23 24 25 26 27 28
chain bonds :
1-7 2-18 5-6 7-8 8-9 9-10 10-11 11-12 12-14 18-19 19-20 20-21 20-22
21-25 21-29 21-30
ring bonds :
1-2 1-5 2-3 3-4 4-5 13-14 13-17 14-15 15-16 16-17 23-24 23-28 24-25
25-26 26-27 27-28
exact/norm bonds :
1-2 1-5 2-3 3-4 4-5 5-6 13-14 13-17 14-15 15-16 16-17 20-22
exact bonds :
1-7 2-18 7-8 8-9 9-10 10-11 11-12 12-14 18-19 19-20 20-21 21-25 21-29
21-30
normalized bonds :
23-24 23-28 24-25 25-26 26-27 27-28
```

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 26:Atom 27:Atom 26:Atom 27:Atom 26:Atom 27:Atom 26:Atom 27:Atom 26:Atom 27:Atom 27:Ato

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR

chain nodes :

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 fam full
FULL SEARCH INITIATED 17:27:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 11 TO ITERATE
```

100.0% PROCESSED 11 ITERATIONS SEARCH TIME: 00.00.01 3 ANSWERS

L2 3 SEA FAM FUL L1

=> d 1-3

- L2 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 849243-28-3 REGISTRY
- ED Entered STN: 26 Apr 2005
- CN 2-Pyrrolidinone, 5-[(1E,3S)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl)1-[6-(2H-tetrazol-5-yl)hexyl]-, (5R)- (CA INDEX NAME)
 OTHER CA INDEX NAME)

CN 2-Pyrrolidinone, 5-[(1E,3S)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-1-

- [6-(1H-tetrazol-5-yl)hexyl]-, (5R)- (9CI) S STEREOSEARCH
- FS STEREOSEARCH MF C21 H27 F2 N5 O2
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, IMSRESEARCH

Absolute stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 2 OF 3 REGISTRY COPYRIGHT 2008 ACS on STN

634193-54-7 REGISTRY RN

ED Entered STN: 05 Jan 2004

CN 2-Pyrrolidinone, 5-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]-1-[6-(2H-tetrazol-5-yl)hexyl]-, (5R)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Pyrrolidinone, 5-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-1-[6-(1H-tetrazol-5-yl)hexyl]-, (5R)- (9CI)

FS STEREOSEARCH

ME C21 H27 F2 N5 O2

SR CA

LC STN Files: CA, CAPLUS, CASREACT, IMSDRUGNEWS, IMSRESEARCH, PROUSDDR, SYNTHLINE, USPATFULL

Absolute stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2008 ACS on STN

634193-28-5 REGISTRY RN

ED Entered STN: 05 Jan 2004

CN 2-Pyrrolidinone, 5-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]-1-[6-(2H-tetrazol-5-v1)hexv1]-, (5R)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

2-Pyrrolidinone, 5-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-1-[6-CN (1H-tetrazol-5-yl)hexyl]-, (5R)- (9CI)

STEREOSEARCH FS C21 H27 F2 N5 O2

MF

CA SR

STN Files: CA, CAPLUS, IMSRESEARCH, USPATFULL LC

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE ENTRY 77.95 TOTAL SESSION 78.16

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 17:29:56 ON 22 JUL 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 20 JUL 2008 HIGHEST RN 1035004-20-6 DICTIONARY FILE UPDATES: 20 JUL 2008 HIGHEST RN 1035004-20-6

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=> S 634193-28-5/RN

L3 1 634193-28-5/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND SET COMMAND COMPLETED

=> D L3 RN IN 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):Y
THE ESTIMATED COST FOR THIS REQUEST IS 1.28 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

- L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 634193-28-5 REGISTRY
- IN 2-Pyrrolidinone, 5-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]-1-[6-(2H-tetrazol-5-yl)hexyl]-, (5R)-
- => SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND SET COMMAND COMPLETED

- \

=> file caplus

 COST IN U.S. DOLLARS
 SINCE FILE
 TOTAL

 FULL ESTIMATED COST
 1.74
 79.95

FILE 'CAPLUS' ENTERED AT 17:30:41 ON 22 JUL 2008
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FILE COVERS 1907 - 22 Jul 2008 VOL 149 ISS 4 FILE LAST UPDATED: 21 Jul 2008 (20080721/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

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=> s 13 L4 1 L3

=> d ibib abs

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:991395 CAPLUS

DOCUMENT NUMBER: 140:23287
TITLE: 2-Pyrrolidinone derivatives for use as EP4 receptor agonists in the treatment of eye diseases such as

glaucoma

INVENTOR(S): Billot, Xavier; Young, Robert N.; Han, Yongxin PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.									APPLICATION NO.									
	WO 2003103772																		
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	ΚZ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	ΝI,	NO,	ΝZ,	OM,	PH,		
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,		
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW								
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
		KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,		
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,		
		BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG		
CA	2488	001			A1		2003	1218		CA 2	003-	2488	001		2	0030	602		
										AU 2003-233729					20030602				
	2003																		
EF	1513	589			A1		2005	0316		EP 2	003-	7270	99		2	0030	602		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
JP	2005	5372	35		T		2005	1208		JP 2	004-	5108	90		2	0030	602		
US	2005	0239	872		A1		2005	1027		US 2	004-	5117	36		2	0041	018		
PRIORIT	PRIORITY APPLN. INFO.:								US 2002-386499P					P 20020606					
											003-					0030	403		
										WO 2	003-	CA83:	8	1	W 2	0030	602		

OTHER SOURCE(S): MARPAT 140:23287

AB This invention relates to 1,5-disubstituted 2-pyrrolidinone derivs. as potent selective agonists of the EP4 subtype of prostaglandin E2 receptors, topical formulations containing the same, and their use in the treatment of glaucoma and other conditions which are related to elevated intraocular pressure in the eye of the patient.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

 LOGOFF? (Y)/N/HOLD:y
 SINCE FILE
 TOTAL

 COST IN U.S. DOLLARS
 BINCE FILE
 TOTAL

 FULL ESTIMATED COST
 3.87
 83.77

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE

TOTAL

SESSION

-0.80

-0.80

STN INTERNATIONAL LOGOFF AT 17:31:48 ON 22 JUL 2008

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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110110	,	OIII.	10	prophetic substances
NEWS	4	JAN	28	USPATFULL, USPAT2, and USPATOLD enhanced with new
NEWO	-	OPIN	20	custom IPC display formats
NEWS	5	JAN	28	MARPAT searching enhanced
NEWS	6	JAN		USGENE now provides USPTO sequence data within 3 days
MEND	0	OPIL	20	of publication
NEWS	7	JAN	20	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN		MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB		STN Express, Version 8.3, now available
NEWS				PCI now available as a replacement to DPCI
NEWS		FEB		IFIREF reloaded with enhancements
NEWS		FEB		IMSPRODUCT reloaded with enhancements
NEWS		FEB		WPINDEX/WPIDS/WPIX enhanced with ECLA and current
MEMO	13	FED	23	U.S. National Patent Classification
NEWS	1.4	MAR	3.1	IFICDB, IFIPAT, and IFIUDB enhanced with new custom
MENO	11	THIL	31	IPC display formats
NEWS	1.5	MAR	3.1	CAS REGISTRY enhanced with additional experimental
HEND	13	THIL	31	spectra
NEWS	16	MAR	31	CA/CAplus and CASREACT patent number format for U.S.
112110			01	applications updated
NEWS	17	MAR	3.1	LPCI now available as a replacement to LDPCI
NEWS		MAR		EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS		APR		STN AnaVist, Version 1, to be discontinued
NEWS		APR		WPIDS, WPINDEX, and WPIX enhanced with new
	20		10	predefined hit display formats
NEWS	21	APR	28	EMBASE Controlled Term thesaurus enhanced
NEWS		APR		IMSRESEARCH reloaded with enhancements
NEWS		MAY		INPAFAMDB now available on STN for patent family
				searching
NEWS	2.4	MAY	30	DGENE, PCTGEN, and USGENE enhanced with new homology
112110			50	sequence search option
NEWS	25	JUN	06	EPFULL enhanced with 260,000 English abstracts
NEWS		JUN		KOREAPAT updated with 41,000 documents
NEWS		JUN		USPATFULL and USPAT2 updated with 11-character
				patent numbers for U.S. applications
NEWS	28	JUN	19	CAS REGISTRY includes selected substances from
				web-based collections
NEWS	29	JUN	25	CA/CAplus and USPAT databases updated with IPC
				reclassification data
NEWS	30	JUN	30	AEROSPACE enhanced with more than 1 million U.S.
				patent records
NEWS	31	JUN	30	EMBASE, EMBAL, and LEMBASE updated with additional
				options to display authors and affiliated
				organizations
NEWS	32	JUN	30	STN on the Web enhanced with new STN AnaVist
				Assistant and BLAST plug-in
NEWS	33	JUN	30	STN AnaVist enhanced with database content from EPFULL
NEWS	EXP	RESS	JUNI	E 27 08 CURRENT WINDOWS VERSION IS V8.3,
				CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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=>

=> file registry

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 21 JUL 2008 HIGHEST RN 1035138-92-1 DICTIONARY FILE UPDATES: 21 JUL 2008 HIGHEST RN 1035138-92-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\STNEXP\Queries\10511736 two.str

chain nodes : 6 7 8 9 10 11 12 13 14 15 16 17 18 25 26 ring nodes : 1 2 3 4 5 19 20 21 22 23 24 chain bonds : 1 -7 2-14 5-6 7-8 8-9 9-10 10-11 11-12 12-13 14-15 15-16 16-17 16-18 17-21 17-25 17-26

ring bonds: 1-2 1-5 2-3 3-4 4-5 19-20 19-24 20-21 21-22 22-23 23-24 exact/norm bonds:

1-2 1-5 2-3 3-4 4-5 5-6 16-18

normalized bonds :

19-20 19-24 20-21 21-22 22-23 23-24

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 12:Atom 14:CLASS 15:CLASS 16:CLASS 17:CLASS 16:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 24:Atom 25:CLASS 26:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

0 TO

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=> s 11 fam sam

SAMPLE SEARCH INITIATED 10:57:41 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS

SEARCH TIME: 00.00.01
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FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80

L2 0 SEA FAM SAM L1

=> s l1 fam full

PROJECTED ANSWERS:

FULL SEARCH INITIATED 10:57:50 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 47 TO ITERATE

100.0% PROCESSED 47 ITERATIONS SEARCH TIME: 00.00.01

).01

0 ANSWERS

5 ANSWERS

L3 5 SEA FAM FUL L1

=> d 1-5

- L3 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 634193-31-0 REGISTRY
- ED Entered STN: 05 Jan 2004
- CN 1-Pyrrolidineheptanoic acid, 2-[(3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]-5-oxo-, (2S)- (CA INDEX NAME)
- OTHER CA INDEX NAMES:
- CN 1-Pyrrolidineheptanoic acid, 2-[(3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-5-oxo-, (2S)- (9CI)
- FS STEREOSEARCH
- MF C21 H27 F2 N O4
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry. Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 634193-29-6 REGISTRY
- Entered STN: 05 Jan 2004 ED
- CN 1-Pvrrolidineheptanoic acid, 2-[(1E,3R)-4,4-difluoro-3-hvdroxv-4-phenvl-1buten-1-v11-5-oxo-, (2R)- (CA INDEX NAME) OTHER CA INDEX NAMES:
- CN 1-Pyrrolidineheptanoic acid, 2-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1butenyl]-5-oxo-, (2R)- (9CI)
- FS STEREOSEARCH
- MF C21 H27 F2 N O4
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

Double bond geometry as shown.

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- ANSWER 3 OF 5 REGISTRY COPYRIGHT 2008 ACS on STN 634193-17-2 REGISTRY
- RN
- Entered STN: 05 Jan 2004
- 1-Pvrrolidineheptanoic acid, 2-[(1E)-4,4-difluoro-3-hvdroxv-4-phenyl-1buten-1-y1]-5-oxo-, (2R)- (CA INDEX NAME)
- OTHER CA INDEX NAMES:
- 1-Pyrrolidineheptanoic acid, 2-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1butenyl]-5-oxo-, (2R)- (9CI)
- STEREOSEARCH
- ME C21 H27 F2 N O4
- SR CA
- T.C STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L3 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 82303-08-0 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 1-Pyrrolidineheptanoic acid, 2-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl]-5-oxo-, (2S)-rel- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
- CN 1-Pyrrolidineheptanoic acid, 2-(4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl)- 5-oxo-, [R*, S*-(E)]-(±)- OTHER NAMES:
- Olham Names: CT 1-Pyrrolidineheptanoic acid, 2-(4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl)-5-oxo-, [R*,S*-(E)]-
- FS STEREOSEARCH
- MF C21 H27 F2 N O4
- LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Relative stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L3 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 82303-00-2 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 1-Pyrrolidineheptanoic acid, 2-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1butenyl]-5-oxo-, (2R)-rel- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN l-Pyrrolidineheptanoic acid, 2-(4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl)- 5-oxo-, $[R^+, R^+ (E)] (\pm) OTHER NAMES:$
- CN 1-Pyrrolidineheptanoic acid, 2-(4,4-difluoro-3-hydroxy-4-phenyl-1-butenyl)-5-oxo-, [R*,R*-(E)]-

FS STEREOSEARCH

MF C21 H27 F2 N O4

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Relative stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 3

L3 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2008 ACS on STN

RN 634193-17-2 REGISTRY

ED Entered STN: 05 Jan 2004

CN 1-Pyrrolidineheptanoic acid, 2-[(1E)-4,4-diffluoro-3-hydroxy-4-phenyl-1-buten-1-yl]-5-oxo-, (2R)- (CA INDEX NAME)

OTHER CA INDEX NAMES: CN 1-Pyrrolidineheptanoic acid, 2-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-

butenyl]-5-oxo-, (2R)- (9CI) FS STEREOSEARCH

MF C21 H27 F2 N O4

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

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FILE COVERS 1907 - 23 Jul 2008 VOL 149 ISS 4 FILE LAST UPDATED: 21 Jul 2008 (20080721/ED)

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=> s 13 L4 3 L3

=> d 1 ibib abs

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:991395 CAPLUS

DOCUMENT NUMBER: 140:23287

TITLE: 2-Pyrrolidinone derivatives for use as EP4 receptor agonists in the treatment of eye diseases such as

glaucoma

INVENTOR(S): Billot, Xavier; Young, Robert N.; Han, Yongxin

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.

PCT Int. Appl., 65 pp. SOURCE:

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

					KIND DATE			APPLICATION NO.						DATE			
WO 2003103772					A1	-	20031218		WO 2003-CA838						20030602		
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA	2488	001			A1		2003	1218	CA 2003-2488001						20030602		
AU 2003233729				A1				AU 2003-233729						20030602			

```
AU 2003233729 B2 20071004 EP 1513589 A1 20050316 EP 2003-727099
                                                                                 20030602
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2005537235 T 20051208 JP 2004-510890 20030602
US 20050239872 A1 20051027 US 2004-511736 20041018
                                                     US 2003-386499P P 20020606
US 2003-460134P P 20030403
WO 2003-CA838 W 20030602
PRIORITY APPLN. INFO.:
                            MARPAT 140:23287
```

OTHER SOURCE(S):

AB This invention relates to 1,5-disubstituted 2-pyrrolidinone derivs. as potent selective agonists of the EP4 subtype of prostaglandin E2 receptors, topical formulations containing the same, and their use in the treatment of glaucoma and other conditions which are related to elevated

intraocular pressure in the eye of the patient. REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 2 ibib abs

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:240727 CAPLUS

DOCUMENT NUMBER: 136:279265

TITLE: EP4 receptor agonists containing 8-azaprostaglandin

derivatives as active ingredients

INVENTOR(S): Maruyama, Tohru; Kobayashi, Kaoru; Maruyama, Takayuki PATENT ASSIGNEE(S):

Ono Pharmaceutical Co., Ltd., Japan PCT Int. Appl., 41 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATI	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
WO	WO 2002024647				A1 20020328			WO 2001-JP8176						20010920			
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VN,	YU,	ZA,	ZW										
	RW:						MZ,										
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
							GΑ,										
AU :	AU 2001090250						2002	0402	AU 2001-90250						20010920		
PRIORITY	PRIORITY APPLN. INFO.:									JP 2	000-	2866	96		A 2	0000	921
										WO 2	001-	JP81	76	1	W 2	0010	920
OTHER SOURCE(S):					MARPAT 136:279265												

PRI GI

AB EP4 receptor agonists contain as the active ingredients 8-azaprostaglandin derivs. represented by the general formula I [R1 = OH, etc.; ring A = benzene ring, etc.; both R2 are H or F; the dotted line indicates a single or double bond; a proviso is given]. The compds. represented by the general formula I are useful as preventives and/or remedies for immune diseases, asthma, diseases in association with decrease in bone mass, pulmonary injury, pulmonary fibrosis, bronchitis, chronic obstructive respiratory diseases, hepatitis, nephritis, hypertension, myocardial ischemia, systemic inflammatory syndrome, sepsis, burn, systemic granuloma, ulcerative colitis, Crohn's disease, multiorgan failure, etc. In an in vitro test for EP4 agonist activity, ±(R,S)-7-(2-((1E)-3hydroxy-4-phenyl-1-butenyl)-5-oxopyrrolidino)heptanoic acid showed an EC50 value of 0.5 μM. Formulations are given.

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REFERENCE COUNT: THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 13 RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 3 ibib abs

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:438745 CAPLUS DOCUMENT NUMBER: 97:38745

ORIGINAL REFERENCE NO.: 97:6623a,6626a

TITLE: 8-Aza-16,16-difluoroprostanoids

INVENTOR(S): Scribner, Richard Merrill PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: Eur. Pat. Appl., 64 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
EP 46082	A2	19820217	EP 1981-303641	_	19810810	
EP 46082	A3	19820303				
EP 46082	B1	19850605				
R: AT, BE, CH,	DE, FR	, GB, IT, LU	, NL, SE			
US 4320136	A	19820316	US 1980-176784		19800811	
CA 1161447	A1	19840131	CA 1981-383299		19810806	
DK 8103522	A	19820212	DK 1981-3522		19810807	
JP 57054166	A	19820331	JP 1981-124205		19810810	
AT 13667	T	19850615	AT 1981-303641		19810810	
PRIORITY APPLN. INFO.:			US 1980-176784	A	19800811	
			EP 1981-303641	Α	19810810	
OTHER SOURCE(S):	CASREA	CT 97:38745;	MARPAT 97:38745			

ÒН

AB Racemic and optically active I [Z = CH2CH2, CH:CH, C.tplbond.C; R = H, C1-12 alkyl, cycloalkyl; R1 = H, Me, Et; R2 = Me, CF3, (un)substituted phenyl; n = 0-2 if R2 = aryl and 3-8 if R2 = Me or CF3] and their salts were prepared by appropriate modification of conventional methods. Typical of compds. prepared was II, whose Me ester gave better short-term gastric protection than PGB1 and at 5 mg/kg gave 80% protection against histamine-induced bronchoconstriction at 2 h orally.

=> logoff ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y)/N/HOLD:v

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	17.85	102.47
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.40	-2.40

ΙI

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